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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/676,620

Applicant(s)

HARRIS, MICHAEL R.

Examiner

LUN-SEE LAO

Art Unit

2614

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1.4.6-19 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1.4.6-19 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 03-10-2009

DETAILED ACTION

Introduction

1. This action is in response to the amendment filed on 03-10-2009. Claims 1, 4, 6-14, 17-19 and 22-23 have been amended and claim 2-3, 5, 20-21 have been canceled and claim 25 has been added. Claims 1, 4, 6-19 and 22-25 are pending.

Claim Objections

3. Claim 4 is objected to because of the following informalities: in claim 4 " + " on line 2, which should be deleted. Appropriate correction is required.
4. Claim 6 is objected to because of the following informalities: in claim 6 " + " on line 1, which should be deleted. Appropriate correction is required.
5. Claim 14 is objected to because of the following informalities: in claim 14 " + " on line 1, which should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 25 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 25 recited "the FM transmitter is tunable for retransmission of the broadcast transmission received by the satellite audio receiver to an available channel of an RDS-capable preinstalled FM stereo car receiver". Applicant pointed out such support can be found in specification 21 (see the remarks page 11 3rd paragraph). The examiner can not find page 21 (assuming 21 is the page number) for the specification since the specification only contains 10 pages. The examiner can not find support from paragraph 21 from the specification even assuming 21 is a paragraph number.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 13, 14 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by MARCOS ALBA (US 2006/0292980).

Consider claim 13 Marcos teaches a transceiver(see figs 3,4), comprising: a radio data system (RDS) modulator(2,4) configured to generate a modulated text data signal modulated as an RDS signal in response to a broadcast audio transmission(see fig.3) including text data(the text data in the RDS encoder (2)) and an audio signal(3), wherein the text data is configured to provide ancillary information descriptive of the audio signal; a frequency modulation (FM) encoder(4) configured to generate an FM encoded audio signal in response to the audio signal; a signal combiner (+) configured to combine the modulated text data signal(the text data in the RDS encoder (2)) and the FM encoded audio signal(3) into a combined signal; and an FM transmitter(5) configured to transmit the combined signal(see page 10, [0159]).

Consider claim 14 Marcos teaches a satellite audio receiver comprising wherein at least one of the RDS modulator, the FM encoder, or the signal combiner are implemented in the satellite audio receiver(see figs 1-3 and page 10, [0158]-[0159]).

Consider claim 19 Marcos teaches handheld audio player, comprising: a storage device (see fig.3 (3)); a processor(2) configured to receive an audio signal(3) and text data(1) providing ancillary information descriptive of the audio signal from the storage device, to generate a modulated text data signal including speech encoding of the text data(the text data in the RDS encoder (2)), to combine the modulated text data and the audio signal into a combined audio signal(+), and to convert the combined audio signal

into an FM signal; and a frequency modulation (FM) transmitter(4,5) configured to transmit the FM signal(see figs 1-3 and page 10, [0158]-[0159]).

10. Claim 13 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang et al. (US PAT. 5,881,365).

Consider claim 13 Yang teaches a transceiver(see figs. 2, 3), comprising: a radio data system (RDS) modulator(42) configured to generate a modulated text data signal modulated as an RDS signal in response to a broadcast audio transmission(see fig.2) including text data(42, reads on the I.D. number)) and an audio signal(40, reads on the voice message), wherein the text data is configured to provide ancillary information descriptive of the audio signal; a frequency modulation (FM) encoder(24) configured to generate an FM encoded audio signal in response to the audio signal; a signal combiner (46) configured to combine the modulated text data signal (42) and the FM encoded audio signal(40) into a combined signal; and an FM transmitter(52) configured to transmit the combined signal(see figs. 2,3 and col. 5 line 65-col. 6 line 67).

Consider claim 19 Yang teaches handheld audio player, comprising: a storage device (see fig.2 (3)); a processor(24) configured to receive an audio signal(26) and text data(26) providing ancillary information descriptive of the audio signal from the storage device(34,36), to generate a modulated text data signal including speech encoding of the text data(36), to combine the modulated text data and the audio signal into a combined audio signal(46), and to convert the combined audio signal into an FM signal;

and a frequency modulation (FM) transmitter(52,46) configured to transmit the FM signal(see figs. 2,3 and col. 5 line 65-col. 6 line 67).

Consider claims 17 and 18, Yang teaches the transceiver further comprising a housing(see fig.3 (60)) configured to mount the receiver(62) and at least one of the RDS modulator, the FM encoder, the signal combiner, or the FM transmitter(see figs. 2, 3 and col. 5 line 65-col. 6 line 67); and the transceiver, wherein at least one of the RDS modulator, the FM encoder, the signal combiner, or the FM transmitter are mounted in the housing(see figs. 2, 3 and col. 5 line 65-col. 6 line 67).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 9-12,19, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US PAT. 6,782,239) in view of Csicsatka et al. (US 2003/0158737).

Consider claim 1 Johnson teaches an FM transmitter comprising(see figs. 1-3): a processor(see fig. 3 (21)) configured to receive text data providing ancillary information descriptive of an audio signal(reads on, MP3 and WMA), and to encode the audio signal

and the digitally encoded speech(from the microphone (23)) according to an FM standard into an FM digital signal; a converter (64) configured to convert the FM digital signal into an analog FM signal; and a transmitter (50) configured to transmit the analog FM signal(see col. 5 line 60-col. 6 line 49); but Johnson does not explicitly teach to convert the text data into digitally encoded speech.

However, Csicsatka teaches to convert the text data into digitally encoded speech(voice) (see figs. 1-3 and page 3 [0042]-[0044], abstract).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Csicsatka in to Johnson to provide a text-to-speech(voice) system for more convenience to the user.

Consider claims 9-12 Johnson teaches the FM transmitter(see fig.3) wherein: an auxiliary audio device(23) is configured to generate the audio signal; and the processor(21) is a control processor of the auxiliary audio device(see col. 5 line 60-col. 6 line 49); and the FM transmitter, wherein the auxiliary audio device includes a device selected from a group consisting of a CD player, a CD-MP3 player, a universal satellite receiver, and a digital audio broadcast receiver(see figs 1-3 and col.9 line 45-67); and the FM transmitter further comprising a wireless remote control receiver coupled to the auxiliary audio device, wherein the wireless remote control receiver is configured to receive commands to control the auxiliary audio device and to receive commands to select text data to be transmitted in the FM signal(see figs 1-3 and col. 5 line 1-col. 6 line 39); and the FM transmitter further comprising: a housing physically distinct from the auxiliary audio device and to which the processor, the converter, and

the transmitter are mounted, wherein the housing includes: an audio input configured to receive the audio signal from an auxiliary audio device; and a data input configured to receive the text data from the auxiliary audio device(see figs 1-3 and col. 5 line 1-col. 6 line 39).

Consider claim 19 Johnson teaches handheld audio player(see figs 1-3), comprising: a storage device (see fig.3 (25)); a processor(21) configured to receive an audio signal(23a) and text data(26) providing ancillary information descriptive of the audio signal from the storage device(34,36), to generate a modulated text data signal including speech encoding of the text data(36), to combine the modulated text data and the audio signal into a combined audio signal(reads on, MP3 and WMA), and to convert the combined audio signal into an FM signal; and a frequency modulation (FM) transmitter(52,46) configured to transmit the FM signal(see figs. 1-3 and col. 5 line 65-col. 6 line 67); but Johnson does not explicitly teach to generate a modulated text data signal including speech encoding of the text data.

However, Csicsatka teaches to generate a modulated text data signal including speech encoding of the text data (see figs. 1-3 and page 3 [0042]-[0044], abstract).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Csicsatka in to Johnson to provide a text-to-speech system for more convenience to the user.

Consider claim 22 Johnson teaches the handheld audio player wherein the handheld audio player is includes at least one of a compact disc (CD) player, a flash player, an

MP3 player, or a hard disk drive (HDD) jukebox(see figs. 1-3 and col. 5 line 65-col. 6 line 67).

Consider claim 23 Johnson teaches the handheld audio player, wherein the processor (see fig.3 (21)) is configured to combine the digitally encoded speech and the audio signal into a combined digital audio signal; wherein a converter (64) is configured to convert the combined digital audio signal into a combined analog audio signal; and wherein the FM transmitter(50) is configured to transmit the combined analog audio signal(see figs. 1-3 and col. 5 line 65-col. 6 line 67); but Johnson does not explicitly teach to convert the text data into digitally encoded speech to generate a modulated text data signal including speech encoding of the text data.

However, Csicsatka teaches to convert the text data into digitally encoded speech (see figs. 1-3 and page 3 [0042]-[0044], abstract).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Csicsatka in to Johnson to provide a text-to-speech system for more convenience to the user.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US PAT. 6,782,239) as modified by Csicsatka et al. (US 2003/0158737) as applied to claims 1 and 19 above and further in view of Erben et al.. (US PAT. 5,349,699).

Consider claim 4 Johnson teach the FM transmitter further comprising a band-pass filter (see fig.3 (31) configured to filter the analog FM signal to exclude signal components outside of a range of frequencies according to an FM standard; but Johnson does not explicitly teach to exclude signal components outside of a range of frequencies according to an RDS standard.

However, Erben teaches a band-pass filter configured to filter the analog FM signal to exclude signal components outside of a range of frequencies according to an RDS standard(see figs. 1-3 and col. 3 line 15-col. 4 line 65).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Erben into the teaching of Csicsatka and Johnson to provide to update a receiver integrated database containing station identification and station attribute information so that data update can be done automatically or semi-automatically.

14. Claims 6-8 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US PAT. 6,782,239) as modified by Csicsatka et al. (US 2003/0158737) as applied to claims 1 and 19 above and further in view of Anderson (US PAT. 5,721,783).

Consider claim 6 Johnson and Csicsatka does not explicitly teach the FM transmitter wherein the processor includes a signal combiner is configured to time-division multiplex the digitally encoded speech and the audio signal to generate the FM digital signal.

However, Anderson teaches teach the FM transmitter wherein the processor (see fig.2 (23)) includes a signal combiner is configured to time-division multiplex the digitally encoded speech and the audio signal to generate the FM digital signal (see figs 2 , 9 and col. 13 line 23-67 and col. 16 line 1-67).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Anderson into the teaching of Johnson and Csicsatka so that the transmission frequencies undergo a hopping sequence for increasing the power at which the signals are transmitted.

Claims 8, 24, they are essentially similar to claim 6 and rejected for the reason stated above apropos to claim 6.

Consider claim 7 Johnson as modified by Csicsatka teaches the processor includes code to control the processor to convert the text data into the digitally encoded speech (in Csicsatka, see figs. 1-3 and page 3 [0042]-[0044], abstract).

15. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. (US PAT. 5,881,365) in view of Lee (US PAT. 6,374,177).

Consider claim 14 Yang does not explicitly teach the transceiver further comprising: a satellite audio receiver wherein at least one of the RDS modulator, the FM encoder, or the signal combiner are implemented in the processor of the satellite audio receiver.

However, Lee teaches a satellite audio receiver wherein at least one of the RDS modulator, the FM encoder, or the signal combiner are implemented in the processor of the satellite audio receiver (see figs 1-3 and col. 2 line 13-59, col.6 line 33-67).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Lee in to Yang provide satellite radios to transmit over large geographic areas and for international internet audio broadcasts so that the transmission frequencies undergo a hopping sequence for increasing the power at which the signals are transmitted.

16. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. (US PAT. 5,881,365) in view of Johnson et al. (US PAT. 6,782,239) and Csicsatka et al. (US 2003/0158737).

Consider claim 15 Yang does not explicitly teach the transceiver, further comprising: a processor configured to convert the text data into digitally encoded speech and to encode the digitally encoded speech and the audio signal into a combined FM digital audio signal; and a converter configured to convert the combined FM digital audio signal into a combined FM analog audio signal.

However, Johnson teaches the transceiver (see figs. 1-3), further comprising: a processor configured to encode the digitally encoded speech and the audio signal into a combined FM digital audio signal; and a converter (64) configured to convert the combined FM digital audio signal into a combined FM analog audio signal (see figs. 1-3 and col. 5 line 65-col. 6 line 67).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Johnson in to Yang to provide a more entertainment to the user.

On the other hand, Csicsatka teaches to a processor configured to convert the text data into digitally encoded speech(voice) and to encode the digitally encoded speech and the audio signal into a combined FM digital audio signal (see figs. 1-3 and page 3 [0042]-[0044], abstract).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Csicsatka in to Yang to provide a text-to-speech system for more convenience to the user.

17. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. (US PAT. 5,881,365) as modified by Johnson et al. (US PAT. 6,782,239) and Csicsatka et al. (US 2003/0158737) as applied to claims 13 and 15 above and further in view of Anderson (US PAT. 5,721,783).

Consider claim 16, Yang, Johnson and Csicsatka does not explicitly teach the FM transmitter wherein the processor includes a signal combiner is configured to time-division multiplex the digitally encoded speech and the audio signal to generate the FM digital signal.

However, Anderson teaches teach the FM transmitter wherein the processor (see fig.2 (23)) includes a signal combiner is configured to time-division multiplex the digitally encoded speech and the audio signal to generate the FM digital signal (see figs 2 , 9 and col. 13 line 23-67 and col. 16 line 1-67).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Anderson into the teaching of Yang,

Johnson and Csicsatka so that the transmission frequencies undergo a hopping sequence for increasing the power at which the signals are transmitted.

18. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. (US PAT. 5,881,365) as modified by Lee (US PAT. 6,374,177) as applied to claims 13 and 14 above and further in view of Johnson et al. (US PAT. 6,782,239).

Consider claim 25, Yang does not explicitly teach the transceiver of wherein the FM transmitter is tunable for retransmission of the broadcast transmission received by the satellite audio receiver to an available channel of an RDS-capable preinstalled FM stereo car receiver.

However, Johnson the transceiver of wherein the FM transmitter is tunable for retransmission of the broadcast transmission received by the FM audio receiver to an available channel of an RDS-capable preinstalled FM stereo car receiver(see figs 1,2 and col. 4 line 66-col. 5 line 59).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Johnson in to the teaching of Yang and Lee provide more choice to entertainment the user.

On the other hand, , Lee teaches a satellite audio receiver (see figs 1-3 and col. 2 line 13-59, col.6 line 33-67).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Lee in to the teaching of Yang and Johnson provide satellite radios to transmit over large geographic areas and for

international internet audio broadcasts so that the transmission frequencies undergo a hopping sequence for increasing the power at which the signals are transmitted.

Response to Arguments

19. Applicant's arguments with respect to claim 1, 4, 6-19 and 22-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2614

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

22. Any response to this action should be mailed to:

Mail Stop ____ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Facsimile responses should be faxed to:
(571) 273-8300

Hand-delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao,Lun-See
/LUN-SEE, LAO/
Examiner, Art Unit 2614
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501
Date 06-11-2009

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2614

